

FANS FOR ROUND DUCTS

Series VENTS TT-MD



Inline mixed-flow fans
with the air flow
up to **9450 m³/h**

Application

New series of the duct fans VENTS TT-MD enclosed in a special sound-insulated casing that ensures low-noise operation of the fans at high aerodynamic characteristics. The fans are compatible with Ø 355, 400, 450, 500 air ducts. VENTS TT-MD combine wide

capabilities and high performance features of both axial and centrifugal fans, thus providing powerful air stream and high pressure. The fans are used as a component part of air handling systems for various commercial and industrial premises with high requirements to noise level, i.e. in libraries, conference halls, educational institutions, kindergartens, etc.

Design

The fan casing is made of polymer-coated steel. The conic impeller with special blade profiling increase air flow speed and provide higher pressure and air flow as compared to standard axial fans. The diffuser, the specially profiled impeller and the directing vanes at outlet from the fan casing distribute air flow in such a way as to attain the best combination of high performance and high pressure at low noise level. The fan casing is equipped with an airtight terminal box for connection to power mains.

Motor

Energy efficient motor with low energy demand. The motor is equipped with thermal switches for the motor overheating protection. The ball bearings extend the motor service life up to 40 000 hrs. at non-stop operation. The motor has IP X4 ingress protection rating.

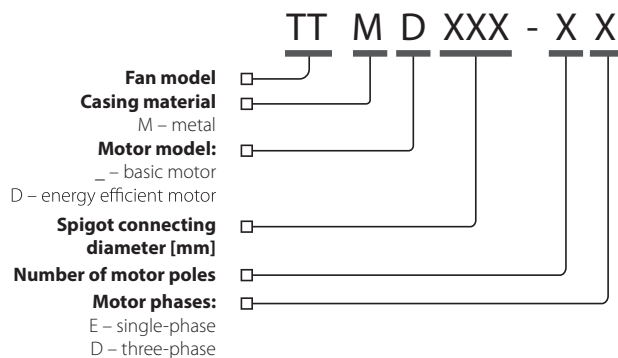
Speed control

Smooth or step speed control with a thyristor or autotransformer speed controller. Several fans may be connected to one controller if the total power and operating current do not exceed the rated controller parameters.

Mounting

The fan may be mounted at any place and at any angle within the ductwork system. Several fans may be installed in one system in parallel to attain higher air flow or in series to increase operating pressure in the system. The fan casing is equipped with fixing brackets for fastening to the floor, wall.

Designation key:

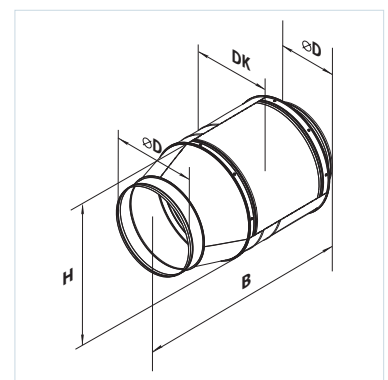


Overall dimensions:

Model	Dimensions			
	B	Ø D	DK	H
TT-MD 355-4E	685	353	605	515
TT-MD 400-4E	740	397	665	570
TT-MD 450-4E	900	447	800	705
TT-MD 500-4E	900	497	815	720
TT-MD 500-4D	900	497	815	720

ErP data

Overall efficiency	η, [%]
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m ³ /h]
Static pressure	[Pa]
Speed	[n/min ⁻¹]
Specific ratio	SR

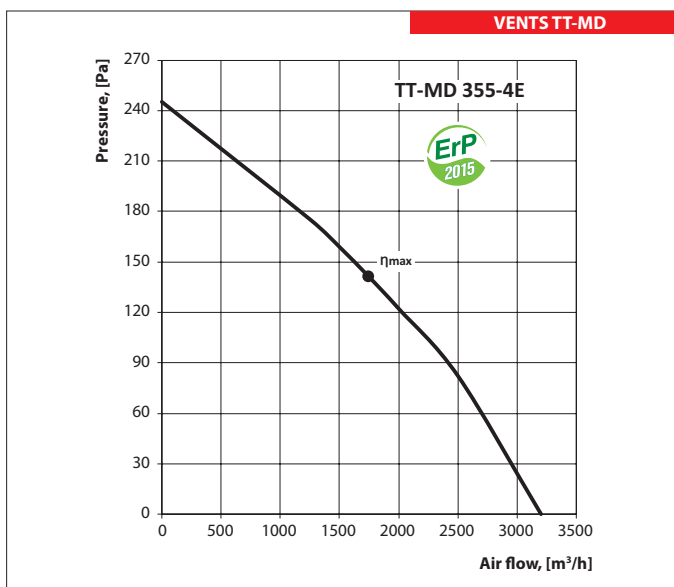


Accessories

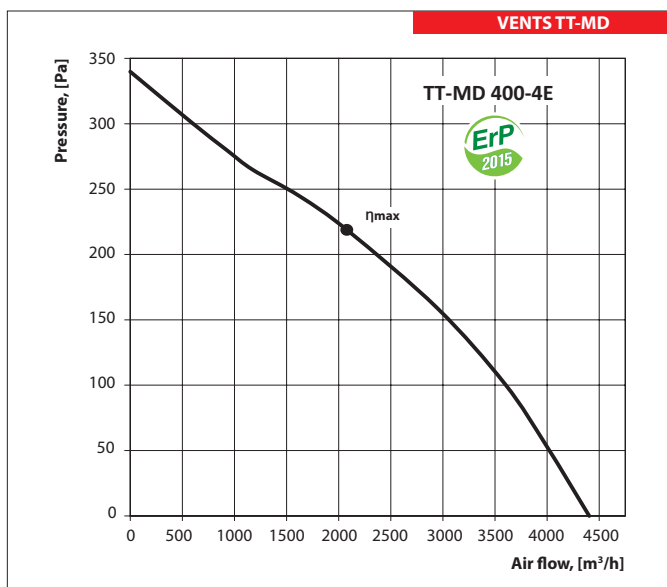


Technical data:

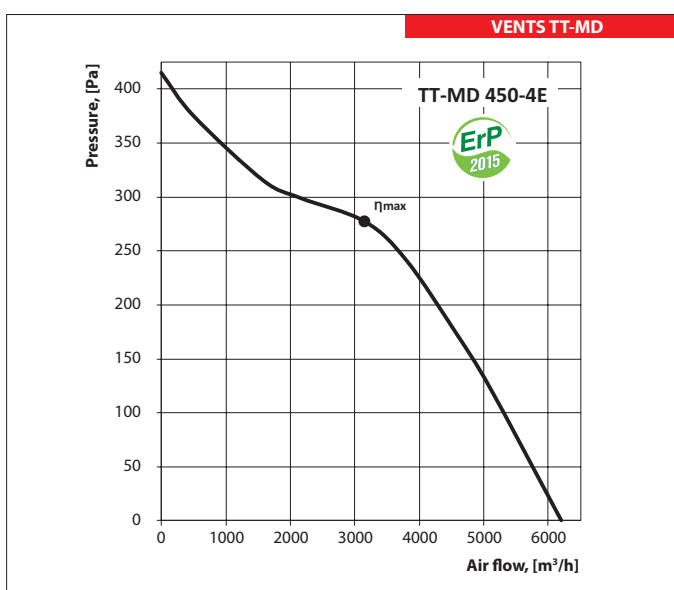
	TT-MD 355-4E	TT-MD 400-4E	TT-MD 450-4E	TT-MD 500-4E	TT-MD 500-4D
Voltage [V]	1~ 230	1~ 230	1~ 230	1~ 230	3~400
Power [W]	310	460	910	1450	1350
Current [A]	1.35	2	4.4	6.1	2.3
Max. air flow [m³/h]	3250	4400	6200	8750	9450
RPM [min ⁻¹]	1390	1340	1330	1310	1320
Sound pressure level at 3 m distance [dBA]	55	57	64	67	68
Transported air temperature [°C]	-25 +60	-25 +60	-25 +60	-25 +60	-25 +60
Protection rating	IPX4	IPX4	IPX4	IPX4	IPX4



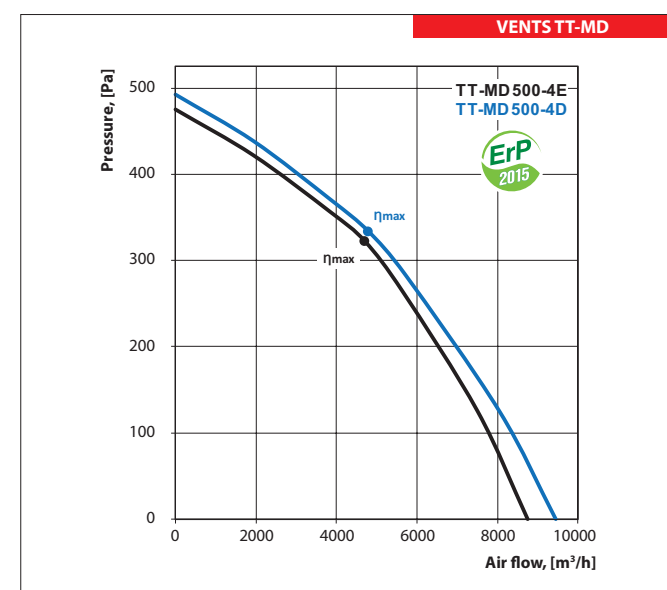
η, [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
30,6	A	Static	47,7	Yes	0,239	1,13	1782	145	1410	1



η, [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
33,2	A	Static	48	Yes	0,389	1,7	2091	218	1360	1



η, [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
35,8	A	Static	47,9	No	0,693	3,45	3157	277	1380	1



η, [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
36,3	A	Static	46	No	1,185	5,1	4710	322	1350	1

η, [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
39,4	A	Static	49,3	No	1,15	2,2	4805	333	1380	1